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| <b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>  |  | Docket Number (Optional)<br><b>AUS920010473US1</b>  |                                   |
| I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]<br>on <u>filed on August 30, 2006</u><br>Signature <u>/Louise Fay/</u><br>Typed or printed name <u>Louise Fay</u>   |  | Application Number<br><b>09/925578</b>  | Filed<br><b>August 9, 2001</b>    |
|   |  | First Named Inventor<br><b>Beukema et al.</b>   |                                   |
|   |  | Art Unit<br><b>2151</b>   | Examiner<br><b>Walsh, John B.</b> |
| Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.<br><br>This request is being filed with a notice of appeal.<br><br>The review is requested for the reason(s) stated on the attached sheet(s).<br>Note: No more than five (5) pages may be provided.  |  |   |                                   |
| I am the<br><input type="checkbox"/> applicant/inventor.<br><input type="checkbox"/> assignee of record of the entire interest.<br>See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.<br>(Form PTO/SB/96)<br><input checked="" type="checkbox"/> attorney or agent of record. <u>34,289</u><br>Registration number<br><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34.<br>Registration number if acting under 37 CFR 1.34 _____ |  | <u>/Wayne P. Bailey/</u><br>Signature<br><b>Wayne P. Bailey</b><br>Typed or printed name<br><b>972-385-8777</b><br>Telephone number<br><b>August 30, 2006</b><br>Date |                                   |
| NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.  |  |   |                                   |
| <input checked="" type="checkbox"/> *Total of <u>1</u> forms are submitted.   |  |   |                                   |

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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|--|---|---|
| In re application: <b>Beukema et al.</b>   | § |   |
|  | § |   |
| Serial No.: <b>09/925,578</b>  | § | Group Art Unit: <b>2151</b>                 |
|  | § |   |
| Filed: <b>August 9, 2001</b>   | § | Examiner: <b>Walsh, John B.</b>             |
|  | § |   |
| For: <b>Apparatus and Method for<br/>Implementing Multicast on a System<br/>Area Network Channel Adapter</b> | § | Attorney Docket No.: <b>AUS920010473US1</b> |
|  | § |   |

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**35525**  
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**PRE-APPEAL BRIEF REQUEST FOR REVIEW  
(AND REASONS IN SUPPORT THEREOF)**

Sir:

This document is submitted concurrently with a Notice of Appeal in compliance with 37 C.F.R. 41.31 and with the rules set out in the OG of July 12, 2005 for the New Appeal Brief Conference Pilot Program.

No fee or extension of time is believed due for this request. However, if any fee or extension of time for this request is required, Applicants request that this be considered a petition therefor. The Commissioner is hereby authorized to charge any additional fee, which may be required, or credit any refund, to Deposit Account No. 09-0447.

## REMARKS

Applicants hereby request a Pre-Appeal Brief Review (hereinafter "Request") of the claims finally rejected in the Final Office Action mailed May 30, 2006 and the Advisory Action mailed August 2, 2006. The Request is provided herewith in accordance with the rules set out in the OG dated July 12, 2005. The reasons for such Request are as follows.

### **I. 35 U.S.C. § 102, Anticipation**

The Examiner rejected Claims 1-35 under 35 U.S.C. § 102 as being anticipated by Kashyap (US 6,944,786). Applicants show clear error in such rejection as follows.

For a prior art reference to anticipate in terms of 35 U.S.C. 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990) (emphasis added by Applicants). Applicants will now show that every element of the claimed invention is not identically shown in a single reference, and thus Claims 1-35 are not anticipated by the cited reference, and therefore the rejection of such claims is clearly erroneous.

With respect to Claim 1, it is urged that the cited reference does not teach the claimed features of (1) "identifying a *plurality of queue pairs* that are members of the multicast group" or (2) "delivering the data packet to *each of the plurality of queue pairs* that are members of the multicast group".

In rejecting the 'identifying' step of Claim 1, the Examiner cites Kashyap's teachings at col. 6, line 10; col. 5, line 52 as teaching 'identifying a plurality of queue pairs' and Kashyap's teachings at col. 5, lines 59-64 as teaching 'that are members of the multicast group'. Applicants urge that Kashyap states at cited col. 6, line 10:

"The end node 502 has running thereon processes 504 having associated QPs 506, 508, and 510."

and states at cited col. 5, line 52:

"Each process may have associated therewith one or more queue pairs (QPs)"

and states at cited col. 5, lines 51-56:

“Each process may have associated therewith one or more queue pairs (QPs), where each QP communicates with the channel adapter (CA) 418 of the node 400 to link to the Infiniband fabric, as indicated by the arrow 420. For example, the process 402 specifically has QPs 406 and 408, whereas the process 404 has a QP 410.”

As can be seen, none of these passages describe any type of multicast group, or of identifying a plurality of queue pairs that are members of a multicast group. Rather, these cited passages discuss associating queue pairs with processes executing within a node (e.g., see Figure 4 where process A has associated queue pairs 406 and 408 and process B has an associated queue pair 410).

As to Kashyap's processing of multicast group information (which is described elsewhere, and is not described in these cited passages), such multicast processing is with respect to a given port of a channel adapter, and is not related to particular queue pairs (Kashyap col. 6, lines 46-48 – “In general, a set of end nodes may join a multicast group, such that the SM assigns a port of each node with a multicast DLID of the multicast group”; Kashyap col. 6, lines 62-64 – “Data packets received by the switch 504 that specify the multicast DLID are thus sent from one of these multicast ports to the associated ports of the multicast group nodes”). A review of Kashyap's Figure 5 clearly shows that ports (elements 514, 516 and 518) are very different from queue pairs (elements 506, 508 and 510). Thus, Kashyap's association of a multicast DLID with a port of each node that is a member of the multicast group does not teach any step of associating or identifying queue pairs that are members of a multicast group.

Per the invention of Claim 1, a data packet is received, and this received data packet includes an identifier of a multicast group, and it is this multicast group for which a plurality of queue pairs are identified that are members of such multicast group. The Kashyap processes, which are associated with queue pairs, are not identified by a received data packet, and thus it is error to equate Kashyap's processes with the claimed multicast group. The Kashyap ports, to which a multicast data packet is associated and sent, are very different from queue pairs. The Kashyap multicast group is directed to and associated with a port of each node (Kashyap Figure 5, element 514, 516), and not to queue pairs. Kashyap teaches that a multicast data packet is sent to ports of the multicast group nodes. There is no association between a multicast group and queue pairs.

In summary, per Kashyap's discussion regarding a received packet having a multicast DLID, such packet is sent to a particular port for each node that has joined the group (Kashyap

col. 3, lines 22-56; col. 6, lines 44-65 and particularly lines 56-65). The present invention advantageously allows for identifying *specific queue pairs that are members of a multicast group* such that a received data packet can be delivered to each of such queue pairs. Quite simply, the cited reference associates nodes (and a given port of each node) with a multicast group, whereas Claim 1 identifies *specific queue pairs* that are members of a multi-cast group. Thus, it is urged that Claim 1 is clearly not anticipated by the cited reference, as every element of the claimed invention is not identically shown in a single reference.

In rejecting the 'delivering' step of Claim 1, the Examiner cites Kashyap's teaching at col. 5, lines 59-64. Applicants urge that Kashyap states at this cited passage:

"A QP includes a send work queue and a receive work queue that are paired together. In general, the send work queue holds instructions that cause data to be transferred between the client's memory and another process's memory, and the receive work queue holds instructions about where to place data that is received from another process."

As can be seen, this passage describes particulars of a single queue pair that holds instructions. In contrast, Claim 1 specifically recites an active step of delivering a data packet, where the data packet is delivered to each of the plurality of queue pairs that are members of the multicast group. This cited passage provides no such teaching, and in fact makes no mention of any type of data packet delivery to members of a multicast group, either as claimed or otherwise, and thus it is further urged that Claim 1 is not anticipated by the cited reference as there is yet another claimed feature not identically shown in a single reference.

Applicants show clear error in the rejection of Claims 2-11, 34 and 35 for reasons given above with respect to Claim 1 (of which Claims 2-11, 34 and 35 depend upon).

Applicants show clear error in the rejection of Claims 12-33 for similar reasons to those given above with respect to Claim 1.

Therefore, the rejection of Claims 1-35 under 35 U.S.C. § 102 has been shown to be clearly erroneous.

## **II. Failure to Enter or Consider Affidavit or Other Evidence**

In an Advisory Action dated 08/02/06, the Examiner refused to enter the affidavit or other evidence submitted by Applicants in their Response to Final Office Action submission dated July 3, 2006. In denying such entry, the Examiner stated that applicant failed to provide a

showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not presented earlier.

Applicants respectfully point out that this affidavit and other evidence was provided by Applicants as a direct result of an expressed suggestion and request for such information by the Examiner. In an Office Action dated December 2, 2005, on page 2 of such action, the Examiner stated that the 35 USC 102 rejection might be overcome “by an appropriate showing under 37 CFR 1.131”. Instead of continuing to debate the merits of patentability with respect to the cited reference, Applicants instead chose to follow the path of least resistance and provide an appropriate showing under 37 CFR 1.131 – as suggested by the Examiner – such that this case could expeditiously pass to issuance. It is urged that the Examiner’s suggestion/solicitation of a 37 CFR 1.131 affidavit to overcome the 35 USC 102 rejection now requires that the Examiner enter and consider such affidavit and other evidence, as such was submitted as a direct result/consequence of such suggestion/solicitation. Applicants justifiably relied upon the Examiner’s suggested course of action – and in reliance thereof chose to not further argue or debate the merits of the cited reference, but instead to provide the suggested affidavit and other evidence – in order to expeditiously further the prosecution of this case and to make a bona fide attempt to advance the application to a condition for allowance. It is clear error for the Examiner to request/suggest such 37 CFR 1.131 showing, and then refuse entry/consideration of same.

The Pre-Appeal Brief Conference Panel is invited to call the undersigned at the below-listed telephone number if in the opinion of the Panel such a telephone conference would expedite or aid the prosecution and examination of this application.

DATE: August 30, 2006

Respectfully submitted,

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